

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions and listings of claims in the application:

1-17. (Cancelled).

18. (Previously Presented) A transmyocardial implant for defining a blood flow pathway directly from a heart chamber through a heart wall to a coronary vessel, the implant comprising:

a coronary portion sized to be received within the vessel;

a myocardial portion sized to pass through the myocardium; and

a transition portion connecting the coronary portion and the myocardial portion, the transition portion defining an opening permitting bending between the coronary portion and the myocardial portion;

wherein the myocardial portion includes a lining for controlling tissue growth in the myocardial portion, and

wherein the myocardial portion includes an agent for limiting thrombus formation.

19. (Previously Presented) The implant according to claim 18, wherein the lining has a length substantially equal to a width of the heart wall.

20. (Previously Presented) The implant according to claim 18, wherein an axis of the coronary portion forms an angle with an axis of the myocardial portion.

21. (Previously Presented) The implant according to claim 18, wherein the myocardial portion is sized to extend into the heart chamber.

22. (Previously Presented) The implant according to claim 18, wherein the coronary portion and the myocardial portion are expandable.

23. (Previously Presented) The implant according to claim 18, wherein the coronary portion is expandable from a first diameter to an enlarged second diameter.

24. (Previously Presented) The implant according to claim 18, wherein the myocardial portion is expandable from a first diameter to an enlarged second diameter.

25. (Previously Presented) The implant according to claim 18, further comprising an agent for encouraging healing.

26. (Previously Presented) The implant according to claim 25, wherein the agent for encouraging healing is a growth factor.

27. (Previously Presented) The implant according to claim 18, wherein the lining contains the agent.

28. (Previously Presented) The implant according to claim 18, wherein the agent is heparin.

29. (Previously Presented) The implant according to claim 18, wherein the agent is an anti-coagulant.

30. (Previously Presented) The implant according to claim 18, wherein the agent is an anti-platelet.

31. (Previously Presented) The implant according to claim 18, wherein the lining includes a polyester fabric.

32. (Previously Presented) The implant according to claim 18, wherein the lining includes PTFE.

33. (Previously Presented) The implant according to claim 18, wherein the lining is on an interior portion of the myocardial portion.

34. (Previously Presented) The implant according to claim 18, wherein the transition portion includes a coil.

35. (New) A method for supporting a wall of a vascular structure at an area adjacent an incision in the wall of the vascular structure, the method comprising steps of:

inserting a support through the incision in the wall of the vascular structure while the support is in a low profile orientation;

positioning at least a portion of the support within the interior of the vascular structure; and

moving the support from the low profile orientation into an expanded orientation so as to contact and support the wall of the vascular structure.

36. (New) The method of claim 35, further comprising introducing a medical device into the interior of the vascular structure by passing the device through the support.

37. (New) The method of claim 36, wherein the vascular structure is a coronary artery and the medical device is a conduit delivery device that is passed through the coronary artery.

38. (New) A conduit for placing a coronary vessel of a patient's heart in communication with a heart chamber, the conduit comprising:

a tubular element configured to positioned in the wall of a patient's heart, the tubular element including first and second ends and a bore defining a blood flow path; and

a vessel supporting mechanism carried by the tubular element, the vessel supporting mechanism being positioned on the conduit so as to contact and support the wall of a coronary vessel when the conduit is positioned in the heart wall.

39. (New) The conduit of claim 38, wherein the tubular element is a rigid, solid walled structure.

40. (New) The conduit of claim 38, wherein the tubular element is an expandable stent including a plurality of struts, and the vessel supporting mechanism comprises some of the struts.